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Title of Invention

An oral composition

Claim

An oral composition consisting of components that do not release calcium ions, characterized in that it is formed by mixing one or more linear or cyclic water soluble polyphosphates represented by the following formula:



wherein M represents Na or K, and each of m and n represents an integer of 3 or greater,

into an aqueous solution of pyrophosphates at a weight ratio between 20% by weight and 100% by weight.

[Example 1]

Toothpaste

| | |
|--|---------|
| Precipitated silica | 30.0% |
| Propylene glycol | 3.0 |
| Sorbitol | 20.0 |
| Sodium carboxymethylcellulose | 1.4 |
| Sodium saccharin | 0.1 |
| Stevioside | 0.1 |
| Potassium glycyrrhizinate | 1.0 |
| Sodium lauryl ^{C-10} sulfate | 0.5 |
| Sodium N-lauroyl ^{C-10} glutamate | 0.5 |
| Tranexamic acid | 0.05 |
| α -alumina anhydride | 3.0 |
| Colloidal silica | 3.0 |
| Methylparaben | 0.05 |
| Aroma chemical | 1.0 |
| Potassium pyrophosphate | 5.0 |
| Sodium tripolyphosphate | 3.0 |
| Water | Balance |
| Total | 100.0% |

[Example 2]

Toothpaste

| | |
|---|----------------|
| Reformed aluminum hydroxide | 18.0% |
| Propylene glycol | 2.0 |
| Sorbit | 20.0 |
| Sodium hydroxyethylcellulose | 1.4 |
| Sodium saccharin | 0.1 |
| Sodium lauryl sulfate | 0.5 |
| Sodium lauryl ⁶⁻¹⁰ POE sulfate | 0.5 |
| Colloidal silica | 3.0 |
| Sodium monofluorophosphate | 0.76 |
| Chlorhexidine gluconate | 0.1 |
| Methylparaben | 0.05 |
| Aroma chemical | 1.0 |
| Sodium pyrophosphate | 3.0 |
| Sodium tetrapolyphosphate | 1.0 |
| Dipotassium hydrogen phosphate | 0.5 |
| Water | <u>Balance</u> |
| Total | 100.0% |

[Example 3]

Toothpaste

| | |
|-------------------------------|----------------|
| Silicic anhydride | 30.0% |
| Titanium oxide | 0.5 |
| Sodium carboxymethylcellulose | 1.1 |
| Carrageenan | 0.2 |
| Sodium lauryl sulfate | 1.4 |
| Sorbit solution | 20.0 |
| Glycerin | 20.0 |
| Propylene glycol | 3.0 |
| Methylparaben | 0.05 |
| Sodium saccharin | 0.15 |
| Aroma chemical | 1.0 |
| Sodium pyrophosphate | 4.0 |
| Sodium hexametaphosphate | 1.2 |
| <u>Water</u> | <u>Balance</u> |
| Total | 100.0% |

Ex 3

[Example 4]

Liquid toothpaste

| | |
|----------------------------|----------------|
| Silicic anhydride | 15.0% |
| 60% sorbit solution | 25.0 |
| Glycerin | 25.0 |
| Propylene glycol | 5.0 |
| Xanthan gum | 0.2 |
| Sodium N-lauroyl glutamate | 0.5 |
| Sodium lauryl sulfate | 0.5 |
| Carrageenan | 0.5 |
| Alginic acid | 1.0 |
| Sodium fluoride | 0.22 |
| Dextranase (1,000,000 U/g) | 0.5 |
| Sodium saccharin | 0.1 |
| Aroma chemical | 1.0 |
| Sodium pyrophosphate | 3.0 |
| Sodium ultrapolyphosphate | 1.2 |
| Water | <u>Balance</u> |
| Total | 100.0% |

[Example 5]

Dental cream

| | |
|-------------------------------|----------------|
| Sorbitol | 20.0% |
| Propylene glycol | 2.5 |
| Sodium lauryl sulfate | 1.0 |
| Sodium carboxymethylcellulose | 1.0 |
| Sodium saccharin | 0.1 |
| Sodium parahydroxybenzoate | 0.1 |
| Aroma chemical | 0.8 |
| Sodium pyrophosphate | 3.0 |
| Sodium tripolyphosphate | 2.0 |
| Sodium dihydrogen phosphate | 0.5 |
| <u>Water</u> | <u>Balance</u> |
| Total | 100.0% |

[Example 6]

Dental cream

| | |
|-------------------------------|----------------|
| Sorbitol | 20.0% |
| Propylene glycol | 3.0 |
| Sodium lauryl sulfate | 1.0 |
| Sodium carboxymethylcellulose | 2.5 |
| Sodium saccharin | 0.1 |
| Ethyl parahydroxybenzoate | 0.1 |
| Aroma chemical | 0.8 |
| Sodium pyrophosphate | 4.0 |
| Sodium ultrapolyphosphate | 0.8 |
| <u>Water</u> | <u>Balance</u> |
| Total | 100.0% |

[Example 7]

Mouth washes

| | |
|-----------------------------|----------------|
| Ethanol | 10.0% |
| Sodium saccharin | 0.05 |
| Sodium monofluorophosphate | 0.05 |
| Chlorhexidine gluconate | 0.01 |
| Pigment | 0.01 |
| Sodium benzoate | 0.05 |
| Antioxidant | 0.01 |
| Aroma chemical | 0.3 |
| Sodium lauryl sulfate | 0.3 |
| Sodium POE myristyl sulfate | 0.3 |
| Potassium pyrophosphate | 2.5 |
| Sodium tetrapolyphosphate | 2.0 |
| Water | <u>Balance</u> |
| Total | 100.0% |

[Example 8]

Gargle tablet

| | |
|-----------------------------|----------------|
| Sodium bicarbonate | 55.0% |
| Polyethylene glycol 400 | 3.0 |
| Aroma chemical | 1.0 |
| Oleic acid | 0.1 |
| Chlorhexidine hydrochloride | 0.05 |
| Citric acid | 17.0 |
| Sodium pyrophosphate | 6.5 |
| Sodium hexametaphosphate | 6.5 |
| Water | <u>Balance</u> |
| Total | 100.0% |